REMARKS

Claims 2, 3, 5, 6 and 16-19, 21 and 22 are now in the case.

Claims 1, 4, 7-15 and 20 have been canceled.

No claim has been allowed.

The Amendments.

Independent Claims 1 and 15 have been replaced with new Independent Claims 21 and 22 to more positively recite the structure of the grapple rake as comprising a plurality of times and to also positively recite the structural relationship of the coulter blade to the grapple rake times and to the subsoiling shank socket. Support for these limitations is found in paragraphs [0025], [0026], [0029], and FIGS. 1-5.

The Rejection under 35 U.S.C. §103(a)/Claims 1-3, 5, 7, 15-18.

Claims 1-3, 5-7 and 15-18 have been rejected under 35
U.S.C. §103(a) as being unpatentable over Risch in view of
Fryrear. This rejection is moot in regard to canceled Claims 1,
7 and 15. In regard to new Claims 21 and 22 and the remaining
claims encompassed by the rejection, withdrawal of the rejection
is requested for the reasons that follow.

Both Risch and Fryrear are drawn to excavating buckets, not

to grapple rakes as required by the claims. In the response filed on December 13, 2004, Applicants unequivocally established in the record the distinguishing features of a grapple rake as compared to other earth-working devices. Although there may be some overlap in function between a bucket equipped with a thumb and a grapple rake equipped with a thumb, the principal function of a rake is not for excavating, and the principal function of a bucket is not for grasping objects, such as logs and other organic debris. New Independent Claims 21 and 22 now clearly recite that the rake comprises a frame and a plurality of times that are secured at their proximal end to the frame. These recitations are deemed to further differentiate the grapple rake of the claimed invention from the buckets of the references.

As stated in the previous response of May 4, 2005,
Applicants acknowledge the teachings in Fryrear of an excavator bucket in combination with sockets for receiving subsoiling shanks, and in combination with curvilinear subsoiling shanks secured within the sockets. Applicants also acknowledge that Risch discloses an excavator bucket having a thumb for grasping objects. At best, there might have been motivation for the person of ordinary skill in the art to combine features of Fryrear and Risch in the construction of an excavator bucket. However, neither the bucket of Fryrear modified to include the

thumb of Risch, nor the bucket of Risch modified to include the shanks of Fryrear is deemed to render obvious the grapple rake claimed by Applicants. Moreover, neither Risch nor Fryrear teaches or suggests the inclusion of a coulter blade as required by all the claims as now amended. New Claims 21 and 22 require that the coulter blade is secured to one of the times on the rake, and that the coulter blade has a leading edge extending from the vicinity of the distal end of the tine to the vicinity of the shank socket. The Examiner urges that one of the teeth of Fryrear is considered a coulter blade. The coulter blade as now defined precludes such an interpretation; and there is nothing in the disclosure of Fryrear nor in the remarks of the Examiner that would support such interpretation. As noted in paragraph [0029] of Applicants' specification, positioning of the coulter blades between the underside of the rake times and the shanks serves to extend the maximum effective subsoiling In paragraph [0032] on pages 11 and 12 of the specification, the function of the coulter blade in shearing organic debris (such as tree roots or branches) is described. By tilting the rake toward the ground, the excavator operator can pin the object against the soil (whether the object is on the soil surface or beneath the surface), thereby enabling the blade to impart a quillotine action on the object. Applicants

further state that the paired coulter blades and shanks cooperate with one another and serve to stabilize longer pieces of debris that exceed the breath of the rake while being subjected to shearing forces. Shearing the debris prevents it from being pulled through the soil or across the soil surface by the subsoiling shanks, thereby helping to preserve the integrity of the topsoil or other soil stratum. It is inconceivable that a single tooth on the bucket of Fryrear could function in this manner.

The Rejection under 35 U.S.C. §103(a)/Claims 6 and 19.

Claims 6 and 19 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Risch in view of Fryrear, and further in view of Rogers. Rogers has been relied upon for a teaching of a subsoiling shank comprising wings. Applicants do not dispute that sweeps, such as that disclosed by Rogers are known in the art. However, the teachings of Rogers fail to overcome the deficiencies of Risch and Fryrear in regard to the primary components of the invention as discussed above. Accordingly, withdrawal of the rejection is deemed to be in order and is hereby requested.

Summary.

The Claims as now amended clearly recite a combination

grapple rake and subsoiling implement that further comprises a coulter blade having a specifically defined structural relationship to the times of the rake and to the socket support. The teachings of the references applied by the Examiner are limited to modifications of excavator buckets, rather than to modifications of a grapple rake. Moreover, there is clearly no fair teaching or suggestion in the applied art of a coulter blade or any other structure having the concomitant function thereof.

Accordingly, Claims 2-3, 5, 6 and 16-19, 21 and 22 are believed to be in condition for allowance, and a favorable action thereon is earnestly solicited. If the Examiner has any questions or wishes to discuss the resolution of any remaining issues, he is invited to call the undersigned at 309-681-6512.

Respectfully submitted,

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